

Notice of Allowability

Application No.

09/955,137

Examiner

Peter J Macchiarolo

Applicant(s)

NOMURA, KAZUSHI

Art Unit

2879

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/04/2004.
2. ☒ The allowed claim(s) is/are 1-10 and 16-35.
3. ☒ The drawings filed on 19 September 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 06/24/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Acknowledged Receipt

1. Receipt is acknowledged of the amendment to the claims, filed 06/04/2004, and the Information Disclosure Statement, filed 06/24/2004. The above have been entered and considered.

Allowable Subject Matter

2. Claims 1-10, and 16-35 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

4. The prior art of record to motivates or discloses the limitations of claim 1, except that an electron emitting film attached to the second electrode and insulated from the first electrode, along with the other limitations of the claim.

5. The prior art of record to motivates or discloses the limitations of claims 10 and 31, except that each carbon fiber has a plurality of graphenes which are stacked so as not to be parallel to an axis direction of the fiber, along with the other limitations of the claim.

6. The prior art of record to motivates or discloses the limitations of claims 20 and 26, except that a first power source for applying a necessary electric field, to cause an electron emission from the plurality of carbon fibers, at least between the anode and the second electrode; and a second power source for applying a necessary electric field, to

Art Unit: 2879

stop the electron emission from the plurality of carbon fibers, between the first electrode and the second electrode, along with the other limitations of the claim.

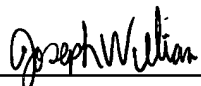
7. Claims 2-9, 16-19, 21-25, 27-30, 32-35 are allowable due to their dependency.
8. Any comments considered necessary by the Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of reasons for Allowance."

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
10. USPN 6274881 to Akiyama et al published August 14, 2001 discloses an electron emitting apparatus similar to claim 1, with a first electrode 102, a second electrode 106, an insulating film 105, and anode 108. However, after careful consideration, films 103 and 104 do not constitute Applicant's "electron-emitting film."
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:30 - 5:00, M-F.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2879

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'J. Williams', with the letters 'p.m.' written in small text below the signature.A handwritten signature in black ink, appearing to be 'Joseph Williams', positioned above a rectangular box.

Joseph Williams Primary Examiner A.U. 2879
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